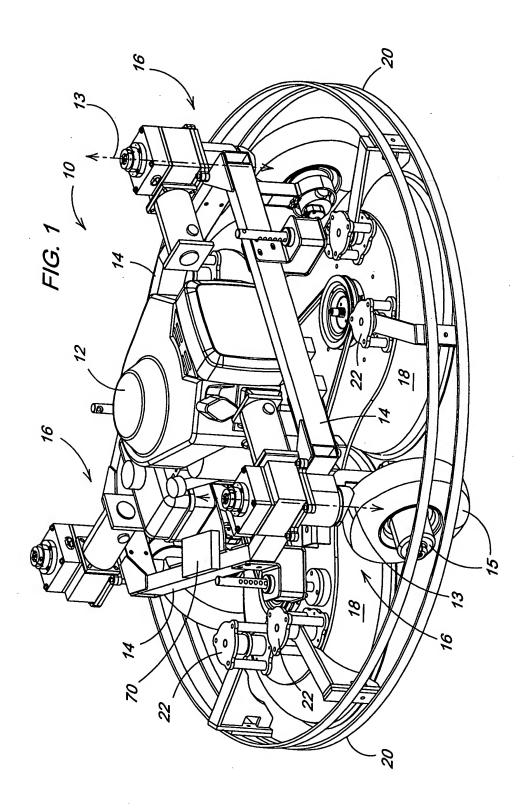
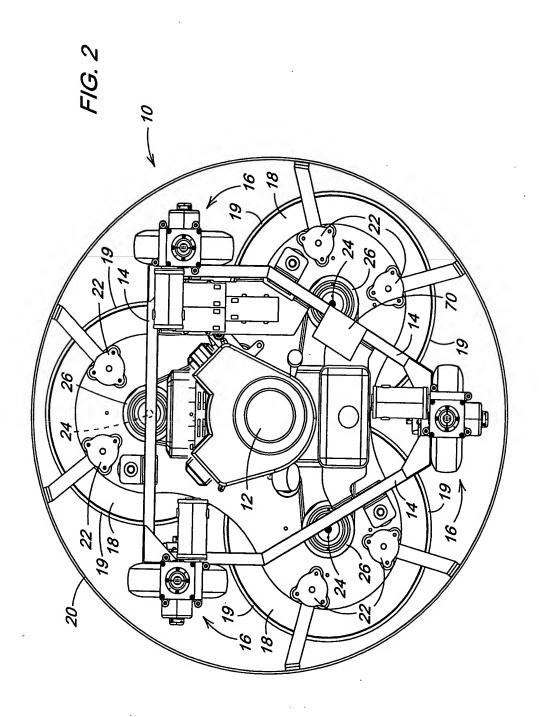
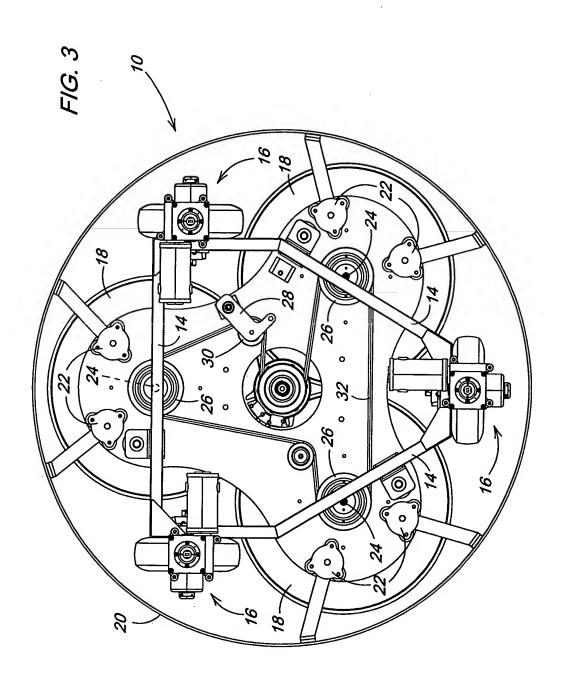
TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET #: 16359 DI /deb, mah



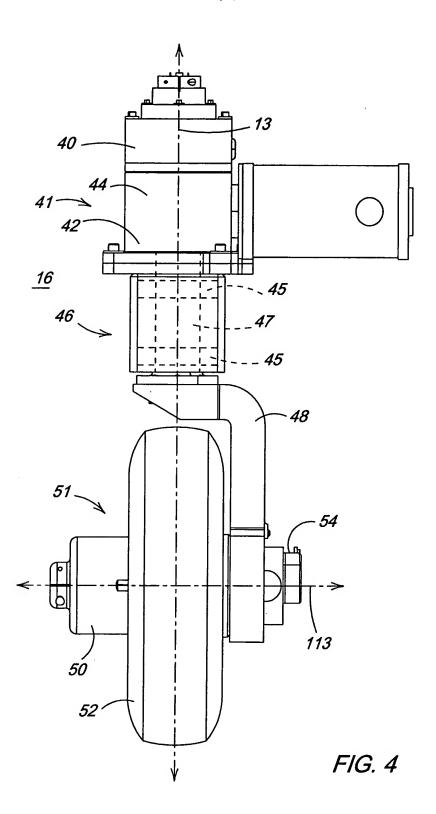
TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET \*: 16359 DI /deb, mah



TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET \*: 16359 D1 /deb, mah

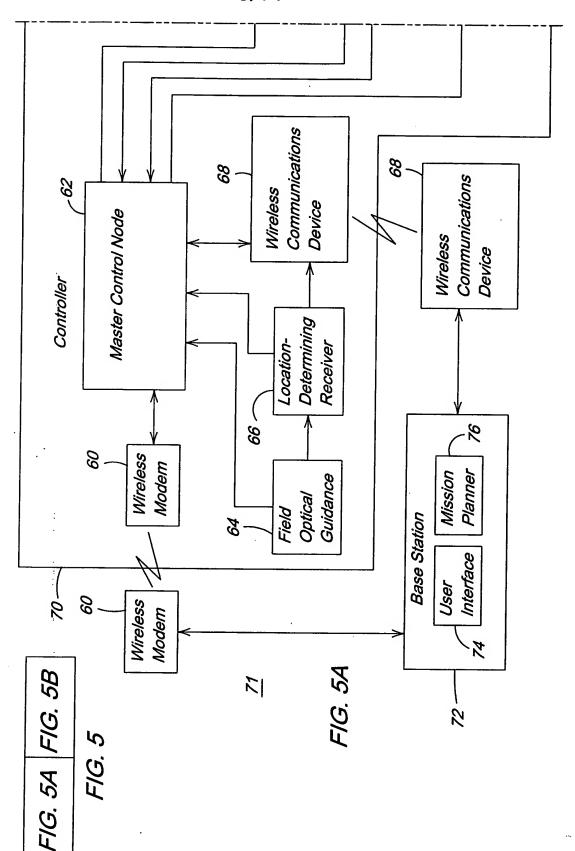


# TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET #: 16359 D1 /deb, mah

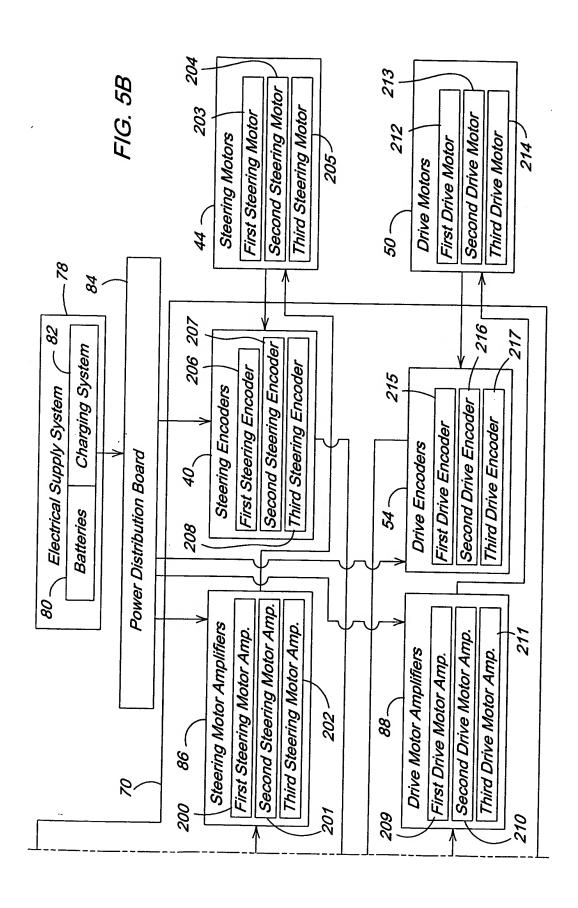


TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET \*: 16359 D1 /deb, mah

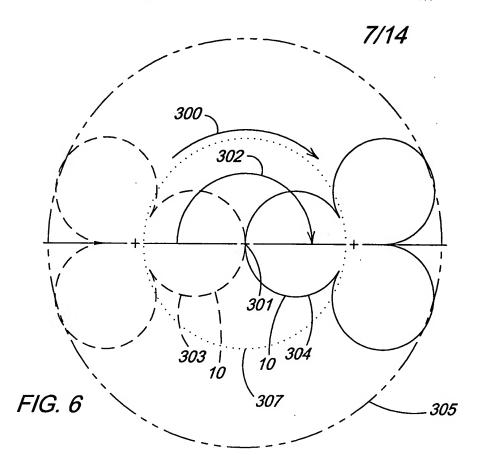
5/14



6/14



#### TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET #: 16359 D1 /deb. mah



*S100* 

IDENTIFY A TARGET AREA FOR APPLICATION OF THE APPROXIMATELY ZERO RADIUS TRIM MANEUVER.

S101

POSITION A CRITICAL POINT (E.G., AN EDGE OF THE MOWING DECK OR AN OUTER EDGE OF A CUTTING BLADE) OF THE MOWER OVER A REFERENCE AXIS OF ROTATION.

S102

ORIENT THE WHEELS GENERALLY TANGENTIALLY TO AN ARC ABOUT THE REFERENCE AXIS OF ROTATION.

S104

CONTROL THE APPLICATION OF ROTATIONAL MECHANICAL ENERGY TO ONE OR MORE OF THE WHEELS TO ROTATE THE MOWER ABOUT THE REFERENCE AXIS OF ROTATION BY A DESIRED REVOLUTIONAL AMOUNT (E.G., FRACTION AND/OR NUMBER OF REVOLUTIONS).

### TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET #: 16359 D1 /deb, mah

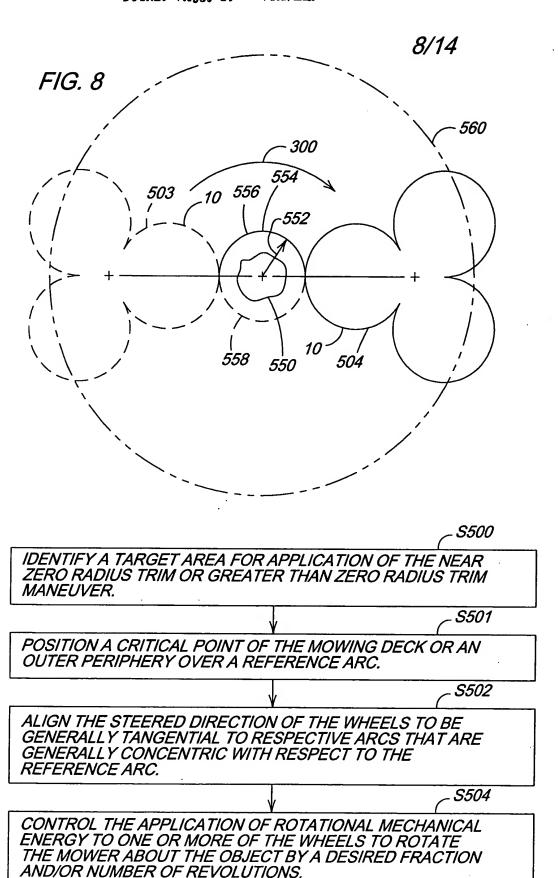


FIG. 9

TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET \*: 16359 D1 /deb, mah

#### 9/14

*S700* 

POSITION AN EDGE OF THE MOWING DECK GENERALLY TANGENTIALLY TO AN OBJECT FOR MOWING OR TRIMMING VEGETATION (E.G., GRASS) NEAR OR AROUND THE OBJECT.

*- S702* 

ORIENT AN ANGULAR DIRECTION (E.G., STEERING ORIENTATION) OF WHEELS ABOUT A STEERING AXIS OF A MOWER IN PREPARATION FOR TRAVERSING A GENERALLY TANGENTIAL ARC ABOUT THE OBJECT.

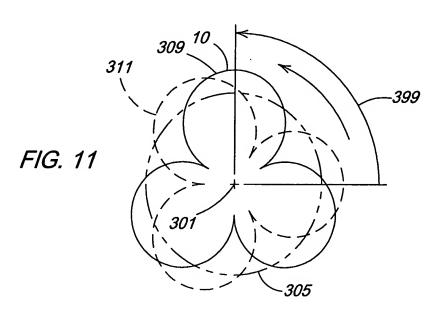
*S704* 

APPLY PROPLULSION OR ROTATIONAL FORCE TO ONE OR MORE OF THE WHEELS TO MOVE THE MOWER ABOUT THE OBJECT BY THE DESIRED AMOUNT, CONSISTENT WITH THE SELECTED WHEEL ORIENTATION.

FIG. 10

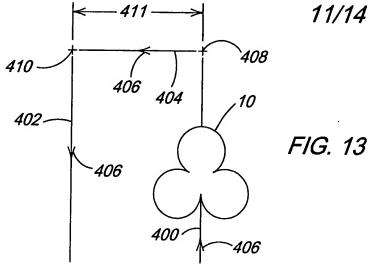
ENHANCED MANEUVERABILITY
INVENTOR: Kenneth Edward Hunt
DOCKET #: 16359 D1 /deb, mah

#### 10/14



S108 DEFINE AN AXIS OF ROTATION AT A DESIRED POINT ALONG A PATH SEGMENT OF THE MOWER. S110 ORIENT THE WHEELS GENERALLY TANGENTIALLY TO A CIRCULAR REGION ABOUT THE DESIRED AXIS OF ROTATION. S112 APPLY ROTATIONAL MECHANIZED ENERGY TO ONE OR MORE OF THE WHEELS TO ROTATE THE MOWER BY A DESIRED ANGULAR AMOUNT (E.G., 90 DEGREES FOR A RIGHT ANGLE TURN). S114 STOP THE APPLICATION OF ROTATIONAL ENERGY UPON COMPLETION OF ROTATION BY THE DESIRED ANGULAR AMOUNT. S116 REORIENT THE WHEELS TOWARD THE DIRECTION OF A DESIRED PATH SEGMENT.

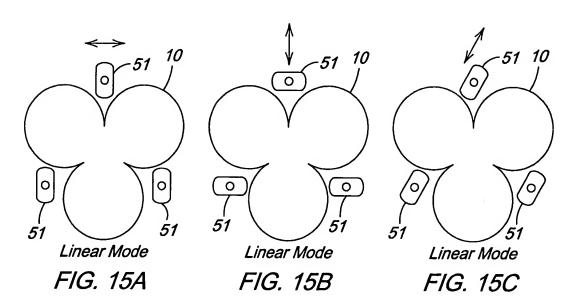
## TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET #: 16359 D1 /deb. mah

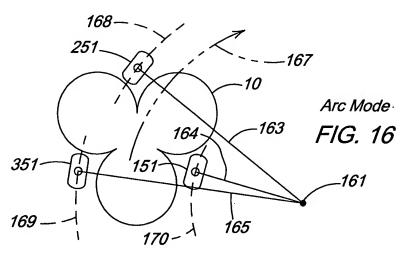


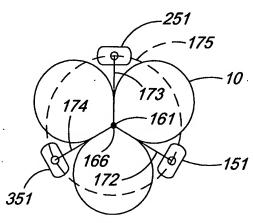
S200 MOVE THE MOWER ALONG A FIRST GENERALLY LINEAR ROW OF A PATH PLAN. S202 DEFINE AN END POINT OF THE FIRST GENERALLY LINEAR ROW AS A FIRST AXIS OF ROTATION. S204 ROTATE THE MOWER BY APPROXIMATELY 90 DEGREES WITH RESPECT TO THE FIRST AXIS OF ROTATION. S206 MOVE THE VEHICLE ALONG A TRANSVERSE SECTION THAT IS SUBSTANTIALLY ORTHOGONAL TO THE FIRST GENERALLY LINEAR ROW. S208 DEFINE AN END POINT OF THE TRANSVERSE SECTION AS A SECOND AXIS OF ROTATION. S210 ROTATE THE MOWER BY APPROXIMATELY 90 DEGREES WITH RESPECT TO THE SECOND AXIS OF ROTATION. S212

MOVE THE MOWER ALONG A SECOND GENERALLY LINEAR ROW IN A GENERALLY OPPOSITE DIRECTION WITH RESPECT TO MOVEMENT OF THE MOWER ALONG THE FIRST GENERALLY LINEAR ROW.

## TITLE: SELF-PROPELLED NOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET #: 16359 D1 /deb, mah



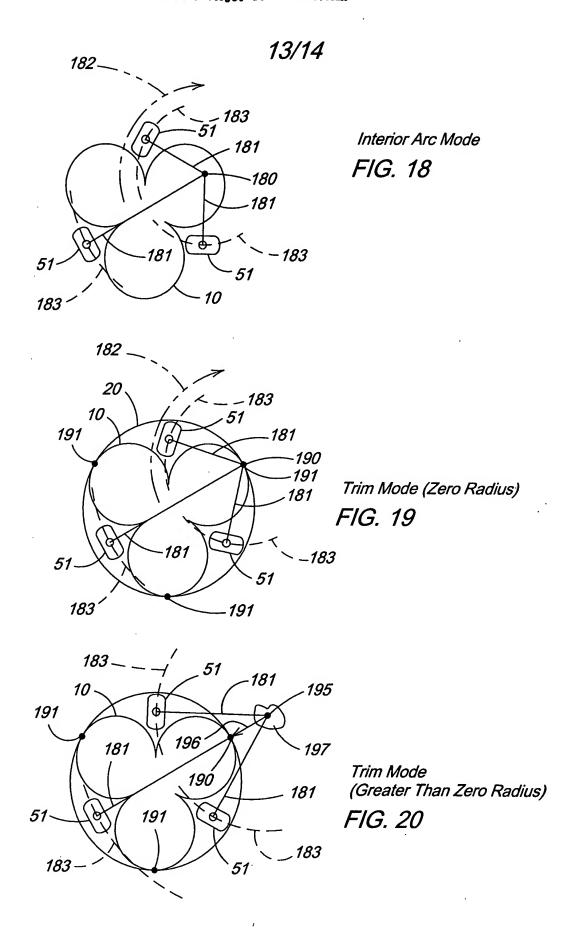




Rotating Mode

FIG. 17

## TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET \*: 16359 D1 /deb, mah



## TITLE: SELF-PROPELLED MOWER HAVING ENHANCED MANEUVERABILITY INVENTOR: Kenneth Edward Hunt DOCKET \*: 16359 D1 /deb, mah

```
14/14
               Path Plan Data
                 1st Path Segment
                     Starting Coordinate (X_1, Y_1)
                     Destination Coordinate (X_2, Y_2)
                     Mode (E.g., Linear, Arc, Rotating or Combination) (M1)
                     Reference Point Coordinate (Where Applicable) (R1)
                 2nd Path Segment
                     Starting Coordinate (X2, Y2)
FIG. 21
                    Destination Coordinate (X3, Y3)
                    Mode(M_2)
                    Reference Point (R2)
                Nth Path Segment
                    Starting Coordinate (X_N, Y_N)
                    Destination Coordinate (X_{N+1}, Y_{N+1})
                    Mode (M<sub>N</sub>)
                    Reference Point (RN)
```

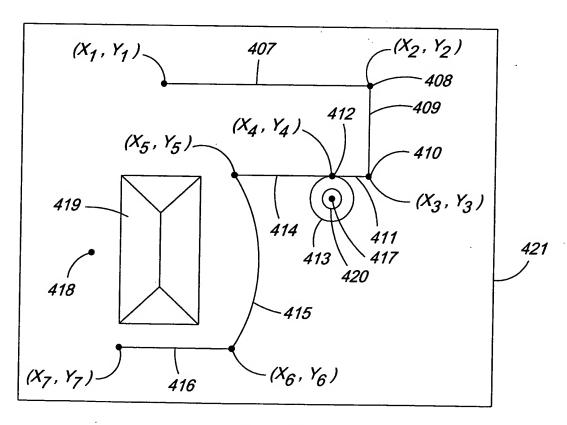


FIG. 22